

**Notice of Allowability**

Application No.

09/784,220

Applicant(s)

BARNETT ET AL.

Examiner

Art Unit

Quochien B Vuong

2685

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 09/21/2004.
2. ☒ The allowed claim(s) is/are 1-3, 5-8, 10, 11, and 13-35 which are renumbered as 1-32.
3. ☒ The drawings filed on 16 February 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Applicant's representative Mr. Jeffrey Wyand on 12/08/2004.

3. The application has been amended as follows:

In the Claims:

Replace the old set of claims with the following set of claims:

1. (Currently Amended) A programmable frequency scanning radio receiver comprising:

a receiver for receiving radio frequency transmissions at each of a plurality of discrete frequencies;

a first communication device coupled to the frequency scanning radio receiver for determining geographical location of the frequency scanning radio receiver by communication with a geographical positioning system;

a memory for storing frequency data, the frequency data including a plurality of frequencies corresponding to respective transmitting parties of interest located within a reception range of the geographical location of the frequency scanning radio receiver;  
~~and~~

a processing circuit coupled to the memory, the receiver, and the first communication device, accessing the memory, controlling the receiver to operate ~~only~~ at the frequencies of the frequency data in the memory, and controlling and receiving a

determination of the geographical location of the receiver by the first communication device for updating the frequency data; and

a second communication device coupled to the processing circuit for communicating with a host system containing a data base of frequency allocation and geographical location information corresponding to the frequency allocations and located remotely from the receiver, supplying the geographical location of the frequency scanning radio receiver determined by the first communication device to the host system, and receiving the frequency allocations for the geographical location of the frequency scanning radio receiver from the host system, the processing circuit storing the frequency allocations for the geographical location in the memory as the frequency data.

2. (Original) The programmable frequency scanning radio receiver according to claim 1 wherein the first communication device and the receiver are contained in a single package.

3. (Original) The programmable frequency scanning radio receiver according to claim 1 wherein the first communication device and the receiver are contained in separate packages.

4. (Canceled)

5. (Original) The programmable frequency scanning radio receiver according to claim 1 wherein the processing circuit, in response to a request, determines distance between a current geographical location of the receiver determined through the first communication device and a geographical location determined through the first communication device at last previous access of the data base and only accesses the data base to update the frequency data stored in the memory if the distance exceeds a minimum distance.

6. (Original) The programmable frequency scanning radio receiver according to claim 1 wherein the processing circuit, in response to a request, determines distance between a current geographical location of the receiver determined through the first communication device and a geographical location determined through the first communication device at last previous access of a data base of frequency allocation and geographical location information corresponding to the frequency allocations, and only accesses the data base to update the frequency data stored in the memory if the distance exceeds a minimum distance.

7. (Original) The programmable frequency scanning radio receiver according to claim 1 comprising an input device coupled to the processing circuit for manually entering a request for the first communication device to determine the geographical location of the frequency scanning radio receiver.

8. (Original) The programmable frequency scanning radio receiver according to claim 1 wherein the processing circuit automatically makes a request for determination of the geographical location of the frequency scanning radio receiver through the first communication device based upon passage of time since the last request for determination of geographical location.

9. (Canceled)

10. (Currently Amended) A programmable frequency scanning radio receiver comprising:

a receiver for receiving radio frequency transmissions at each of a plurality of discrete frequencies;

a memory for storing frequency data, the frequency data including a plurality of frequencies corresponding to respective transmitting parties of interest located within a reception range of the frequency scanning radio receiver;

a data base of frequency allocations and geographical location information corresponding to the frequency allocations, internal to the frequency scanning radio receiver, for programming the frequency scanning radio receiver; and

a processing circuit coupled to the memory, the receiver, and the data base, assembling the frequency data from the data base, based on geographical location of the frequency scanning radio receiver, storing in the memory the frequency data assembled from the data base, and controlling the receiver to monitor transmissions ~~only~~ at the frequencies of the frequency data in the memory.

11. (Currently Amended) A method of automatically programming a frequency scanning radio receiver to monitor transmissions ~~only~~ on programmed discrete frequencies comprising:

determining geographical location of the frequency scanning radio receiver through a first communication device coupled to the frequency scanning radio receiver by communicating with a geographical positioning system;

in response to the geographical location determination, assembling frequency data<sub>1</sub> with a search engine within the frequency scanning radio receiver, from a data base internal to the frequency scanning receiver and including frequency allocations and geographical location information corresponding to the frequency allocations<sub>1</sub> for locations proximate the geographical location of the frequency scanning radio receiver, determined through the first communication device;

supplying the frequency data from the data base to a memory in the frequency scanning radio receiver; and

in response to the frequency data received from the data base, programming the frequency scanning radio receiver to monitor transmissions ~~only~~ on operating frequencies of the frequency data.

Claim 12 (Canceled)

13. (Currently Amended) A method of automatically programming a frequency scanning radio receiver to monitor transmissions ~~only~~ on programmed discrete frequencies comprising:

determining geographical location of the frequency scanning radio receiver through a first communication device coupled to the frequency scanning radio receiver by communicating with a geographical positioning system;

in response to the geographical location determination, assembling frequency with a data base including frequency allocations and geographical location information corresponding to the frequency allocations, for locations proximate the geographical location of the frequency scanning radio receiver determined through the first communication device, wherein the data base is located in a host system remote from the frequency scanning radio receiver and including sending a programming request to the host system through a second communication device internal to the frequency scanning radio receiver, and receiving the frequency data from the host system through the second communication device, the frequency data being assembled in the host system;

supplying the frequency data from the data base to a memory in the frequency scanning radio receiver; and

in response to the frequency data received from the data base, programming the frequency scanning radio receiver to monitor transmissions ~~only~~ on operating frequencies of the frequency data.

14. (Original) The method of claim 11 including manually requesting the first communication device to determine the geographical location of the frequency scanning radio receiver.

15. (Original) The method of claim 11 including automatically determining the geographical location of the frequency scanning radio receiver through the first communication device at respective time intervals.

16. (Original) The method of claim 11 including, in response to a determination of current geographical location of the frequency scanning radio receiver, determining distance between the current geographical location and the geographical location since last access of the data base, and assembling the frequency data only if the distance exceeds a minimum distance.

17. (Currently Amended) A programmable transceiver comprising:  
a receiver for receiving radio frequency transmissions at each of a plurality of discrete frequencies;  
a transmitter for transmitting radio frequency transmissions at each of a plurality of discrete frequencies;  
a first communication device coupled to the transceiver for determining ~~the~~ geographical location of the transceiver by communication with a geographical positioning system;  
a memory for storing frequency data, the frequency data including a plurality of frequencies corresponding to respective transmitting and receiving parties of interest located within a reception and transmission range of the geographical location of the transceiver; and  
a processing circuit coupled to the memory, the receiver, the transmitter, and the first communication device, accessing the memory, controlling the receiver and the transmitter to operate ~~only~~ at the frequencies of the frequency data in the memory, and controlling and receiving a determination of the geographical location of the transceiver by the first communication device for updating the frequency data.

18. (Original) The programmable transceiver according to claim 17 wherein the first communication device and the transceiver are contained in a single package.

19. (Original) The programmable frequency scanning radio receiver according to claim 17 wherein the first communication device and the transceiver are contained in separate packages.

20. (Original) The programmable transceiver according to claim 17 including a data base of frequency allocations, and geographical location information corresponding to the frequency allocations internal to the transceiver, wherein the processing circuit, in response to a determination of geographical position of the transceiver through the first communication device, accesses the data base, selects frequency allocations for the geographical location of the transceiver, and stores the frequency allocations selected as the frequency data in the memory.

21. (Original) The programmable transceiver according to claim 20 wherein the processing circuit, in response to a request, determines distance between a current geographical location of the receiver determined through the first communication device and a geographical location determined through the first communication device at last previous access of the data base and only accesses the data base to update the frequency data stored in the memory if the distance exceeds a minimum distance.

22. (Original) The programmable transceiver according to claim 17 wherein the processing circuit, in response to a request, determines distance between a current geographical location of the transceiver determined through the first communication device and a geographical location determined through the first communication device at last previous access of a data base of frequency allocation and geographical location information corresponding to the frequency allocations, and only accesses the data base to update the frequency data stored in the memory if the distance exceeds a minimum distance.

23. (Original) The programmable transceiver according to claim 17 comprising an input device coupled to the processing circuit for manually entering a request for the first communication device to determine the geographical location of the transceiver.



24. (Original) The programmable transceiver according to claim 17 wherein the processing circuit automatically makes a request for determination of the geographical location of the transceiver through the first communication device based upon passage of time since the last request for determination of geographical location.

25. (Original) The programmable transceiver according to claim 17 comprising a second communication device coupled to the processing circuit for communicating with a host system containing a data base of frequency allocation and geographical location information corresponding to the frequency allocations and located remotely from the transceiver, supplying the geographical location of the transceiver determined by the first communication device to the host system, and receiving the frequency allocations for the geographical location of the transceiver from the host system, the processing circuit storing the frequency allocations for the geographical location in the memory as the frequency data.

26. (Currently Amended) A programmable transceiver comprising:  
a receiver for receiving radio frequency transmissions at each of a plurality of discrete frequencies;  
a transmitter for transmitting radio frequency transmission at each of a plurality of discrete frequencies;  
a memory for storing frequency data, the frequency data including a plurality of frequencies corresponding to respective transmitting and receiving parties of interest located within a reception and transmission range of the transceiver;  
a data base of frequency allocations and geographical location information corresponding to the frequency allocations, internal to the transceiver, for programming the transceiver; and  
a processing circuit coupled to the memory, the receiver, the transmitter, and the data base, assembling the frequency data from the data base, based on geographical location of the transceiver, storing in the memory the frequency data assembled from

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the data base, and controlling the receiver and the transmitter to operate ~~only~~ at the frequencies of the frequency data in the memory.

27. (Currently Amended) A method of automatically programming a transceiver to operate ~~only~~ on programmed discrete frequencies comprising:

determining geographical location of the transceiver through a first communication device coupled to the transceiver by communicating with a geographical positioning system;

in response to the geographical location determination, assembling frequency data from a data base including frequency allocations and geographical location information corresponding to the frequency allocations for locations proximate the geographical location of the transceiver determined through the first communication device;

supplying the frequency data from the data base to a memory in the transceiver; and

in response to the frequency data received from the data base, programming the transceiver to operate ~~only~~ on operating frequencies of the frequency data.

28. (Original) The method of claim 27 wherein the data base is internal to the transceiver and including assembling the frequency data with a search engine within the transceiver.

29. (Original) The method of claim 27 wherein the data base is located in a host system remote from the transceiver and including sending a programming request to the host system through a second communication device internal to the transceiver, and receiving the frequency data from the host system through the second communication device, the frequency data being assembled in the host system.

30. (Original) The method of claim 27 including manually requesting the first communication device to determine the geographical location of the transceiver.

31. (Original) The method of claim 27 including automatically determining the geographical location of the transceiver through the first communication device at respective time intervals.

32. (Original) The method of claim 27 including, in response to a determination of current geographical location of the transceiver, determining distance between the current geographical location and the geographical location since last access of the data base, and assembling the frequency data only if the distance exceeds a minimum distance.

33. (Previously presented) The method of claim 13 including manually requesting the first communication device to determine the geographical location of the frequency scanning radio receiver.

34. (Previously presented) The method of claim 13 including automatically determining the geographical location of the frequency scanning radio receiver through the first communication device at respective time intervals.

35. (Previously presented) The method of claim 13 including, in response to a determination of current geographical location of the frequency scanning radio receiver, determining distance between the current geographical location and the geographical location since last access of the data base, and assembling the frequency data only if the distance exceeds a minimum distance.

#### ***Reasons for Allowance***

4. Claims 1-3, 5-8, 10, 11, 13-35 are allowed over the cited prior art.
5. The following is an examiner's statement of reasons for allowance:

Regarding independent claims 1, 13, 17, 26, and 27, the cited prior art fails to teach or fairly suggest the claimed invention with the same reasons set forth in the previous Office action mailed 07/16/2004.

Regarding independent claims 10 and 11, the cited prior art fails to teach or fairly suggest the claimed invention with the reasons set forth in the Applicant's remarks filed 09/21/2004, pages 14-15.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quochien B Vuong whose telephone number is (703) 306-4530. The examiner can normally be reached on M-F 9:30-18:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (703) 305-4385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**QUOCHIE B. VUONG**  
**PRIMARY EXAMINER**

Quochien B. Vuong

Dec. 08, 2004.